

assigned password. The membership can expand by invitation or submitting requests. Accounts and passwords are given securely to overseas operations. Restricted accesses to the database by these accounts are granted. Users can update worldwide projects and their status, and information, all through Internet access.

Another example implementing the present invention would be for a publish & subscribe enterprise. The focus of the implementation is the identification of subscribers to receive only relevant information. In this example, the enterprise is a membership network defined by the inventive model (a people organization with a list of attributes such as permanent address, sex, profession, age range, household info, habits, etc.). The membership network expands through the introduction of new members by existing members. The virtual links of the present invention are implemented to the membership base to define a criteria for the formation of "virtual communities". Examples of virtual communities are:

e.g.1: members who live in the Boston area, within age range 35-45, golf player

e.g.2: members who have kids age 2-8, annual income > 75K, and have accessed the enterprise's network more than once a week.

Selected marketing messages can then be "pushed" to users within the same virtual communities. (e.g. "A new intermediate level golf class series will be held in the Boston area." This message/product/service will be particularly interesting to the virtual community as defined in e.g. 1 above).

The dynamic organizational information system of the present invention, the underlying methodology and organization model, along with its system architecture and user interfaces are presented as a comprehensive tool to model an enterprise for collaborative computing. The present invention abstracts the organization model from the role model, thus giving flexibility in complex organization modeling. The present invention provides a unique dynamic inter-relationship that is expressed by using regular expressions over member attributes and contextual variables. The relationship model is important in supporting collaborative software such as workflow, for authentication, authorization and dynamic job assignment. Using virtual links, the present invention can model dynamic roles such that policies regarding various operations over the work objects can be defined and maintained. The inventive life-cycle of the members reflects the dynamic state changes of resources in reality. This provides better support of organization management and makes dynamic task re-routing in a workflow system possible in case a resource is absent from its duty or other condition exists which prevents the resource from completing the task.

Numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described herein.

What is claimed is:

1. A utility for an organizational database to support collaborative computing between users within a computer system network by an enterprise having a plurality of objects, the utility comprising:

means for expressing information received from at least one of the users;

means for storing a plurality of classes of organizational objects, each class having any number of member objects;

means for mapping the member objects to the objects within the enterprise; and

means for virtually linking one or more of the member objects to at least one other member object with a relationship definition which can be dynamically evaluated and resolved at runtime of the utility, the expressing means determining which of the relationship definitions to be evaluated and resolved, the expressing means coupled to the storing means, mapping means, and virtually linking means.

2. The utility of claim 1 wherein the storing means includes vertically partitioning the member objects of the enterprise and horizontally partitioning an individual member object into sub-groups.

3. The utility of claim 1 wherein one of the classes includes a main member class having attributes and methods.

4. The utility of claim 3 wherein the attributes and methods are user-defined.

5. The utility of claim 1 wherein the utility includes a life-cycle means for representing the availability of one or more member objects to function in response to the expressing means, the life-cycle means having a plurality states to indicate its availability to function, the life-cycle means changing from one state to another by input from one of the users.

6. The utility of claim 5 wherein the plurality of states includes an active state which changes to an inactive state simulating the reality of the member object being available for its function, or a removal state wherein the information of the member object is retained in the storing means, or a forgotten state wherein the information of the member object is archived.

7. The utility of claim 1 wherein the virtual linking means includes at least one relational definition between two member objects is reversible.

8. The utility of claim 1 wherein expressing means includes a graphical user interface for users to explore the relationships between resources.

9. The utility of claim 1 wherein the utility assigns a unique identifier across the enterprise.

10. The utility of claim 1 wherein the expressing means includes means for querying the relationship definition to resolve an expression received from at least one of the users.

11. A method for supplying information through an organizational database to support collaborative computing between users within a computer system network by an enterprise having a plurality of objects, the method including the steps of:

expressing information received from at least one of the users;

storing a plurality of classes of organizational objects wherein each class includes any number of member objects;

mapping member objects to an actual entity within the enterprise;

virtually linking one or more of the member objects to at least one other member object with a relationship definition; and

dynamically evaluating and resolving a virtual link relationship definition at runtime of the utility, the expressing step determining which of the relationship definitions are to be evaluated and resolved.

12. The method of claim 11 wherein the utility further includes vertically partitioning a plurality of resources of the enterprise and horizontally partitioning an individual resource into sub-groups.